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An Assessment of the Relationship between the Quality of Parenting Behaviors and the Potential for Child Maltreatment

Chinyere Nwamuo

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An Assessment of the Relationship between the Quality of Parenting Behaviors and the Potential for Child Maltreatment
(Under the direction of John R. Lutzker, PhD.)

Abstract

Child maltreatment is a critical public health problem with risk factors that directly hinder the quality of interactions between parent and child. These interactions, guided by the quality of parenting behaviors, form the foundation through which a child develops physically, psychologically, and emotionally. This study examined the quality of 12 parenting behaviors during interactive play between parent and child and their association to the potential of child maltreatment with the interactive effect of demographic variables. It was hypothesized that poor interactive parenting behaviors between parent and child would be associated with higher maltreatment potential. Participants were 99 high-risk families drawn from the first cohort of an ongoing cluster randomized research trial. The 12 parenting behaviors and their interaction with family demographic characteristics were not predictive of the potential for child maltreatment among participant families. Although, the proposed hypothesis was not supported, the findings suggest the need for further investigation of other familial factors influencing maltreatment potential among participant families.

Keywords: Child maltreatment, parent-child interaction, home visiting, SafeCare, Parents as Teachers

AN ASSESSMENT OF THE RELATIONSHIP BETWEEN THE QUALITY OF PARENTING BEHAVIORS AND THE POTENTIAL FOR CHILD MALTREATMENT.

by

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B.S., EMORY UNIVERSITY

(Under the direction of John R. Lutzker, Ph.D.)

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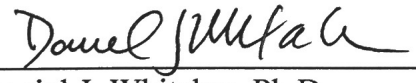

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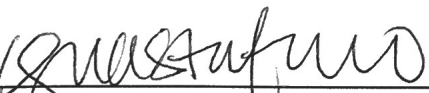

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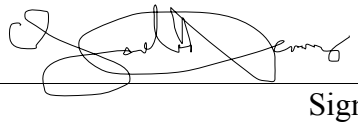

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Georgia Department of Public Health (Volunteer Health Care Program) – Safety Net Clinic

- Maintain administrative and clerical operations
- Determine patient eligibility for SafetyNet services, schedule and coordinate appointments and labs, and assist patients in completing appropriate forms and accessing community resources.
- Implement a follow-up plan for high-risk patients with chronic disease and other moderate to severe health conditions or risky health behaviors.
- Compile, organize, and update patient medical records and conduct real-time tracking of identified patient populations and clinical processes.

Center for Healthy Development, Atlanta, GA August 2013 – Present
Graduate Research Assistant
National SafeCare Training and Research Center and Prevent Child Abuse Georgia

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- Create and manage databases then compile, verify, and secure participant data
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Grady Memorial Hospital, Atlanta, GA April 2014 – September 2014
Clinical Decision Support, Quality and Performance Improvement Intern – Surgical Care

- Conducted focus reviews for Grady Urology and Emory Appendectomy, Cholecystectomy, and Small Bowel surgical procedures for 2013 Quarter 4 and 2014 Quarter 1
- Abstracted retrospective and real-time patient surgical charts and conducted analysis of hospital compliance with surgical core measures under the Surgical Care Improvement Project (SCIP)
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Research Assistant - Social Engagement in Autism and Related Disorders, PI Ami Klin

- Prepared and entered family medical history, maternal health conditions,

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- Compiled, sorted, verified, and secured patient data
- Performed clerical and program support tasks through child care and interactive play, pre-visit paperwork and general project administration duties
- Shadowed weekly cognitive, speech-language and autism diagnostic assessments of infants and toddlers

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An Assessment of the Relationship between the Quality of Parenting Behaviors and the Potential for Child Maltreatment

Child maltreatment (CM) is a serious public health problem that has considerable short- and long-term implications for a child's development and wellbeing. The Child Abuse Prevention and Treatment Act (CAPTA) defines maltreatment as "any act or failure to act on the part of a parent or caregiver which results in death, serious physical or emotional harm, sexual abuse or exploitation; or an act, or failure to act, that presents an imminent risk of serious harm" (Department of Health and Human Services [DHHS], 2013a, p.2). CM has a total lifetime cost of approximately $124 billion annually (Fang, Brown, Florence, & Mercy, 2012). In 2012 alone, according to the National Child Abuse and Neglect Data System (NCANDS), there were an estimated 2.1 million cases of maltreatment reported to Child Protection Services (CPS); 678,047 of these cases were substantiated, representative of 71% professional reports (e.g., medical personnel, legal and law enforcement personnel), 13.3% nonprofessional (e.g., alleged victims, friends and neighbors, alleged perpetrators), and 15.7% unclassified sources (anonymous, other, or unknown). For all reported cases, the highest rates of victimization were observed in victims of American Indian, African-American, Alaska Native, and multiple racial descents, and of all unique victims, 78.3% of cases attributed to neglect, 18.3% to physical abuse, and 9.3% to sexual abuse (DHHS, 2013b). Conversely, the National Incidence Study (NIS-4), which collects reports from sentinel reporters, individuals who have routine contact with children such as teachers or policemen, estimates that 1.25 million children were victims of CM (Sedlak, Mettenburg, Basena, Petta, McPherson, Greene & Li, 2010). Thus, it is likely that the true prevalence of CM is underreported and is somewhere in the middle between the NIS and NCANDS estimates.

The spectrum of CM events is linked to various adverse lifelong outcomes, which includes traumatic brain injury, cognitive impairment, risky health behaviors, and increased odds of acquiring chronic diseases (Dong, Anda, Felitti, Williamson, Dube, Brown, & Giles, 2005; Stevenson, 2007; Anda, Brown, Dube, Bremner, Felitti, & Giles, 2008; Niederkrotenthaler, Xu, Parks, & Sugerman, 2013). There are additional adverse consequences to social, behavioral, psychological, and physical health outcomes including decreased interpersonal and coping skills, sexually transmitted infections as a result of risky behavior, poor school adaptation, and decreased prosocial behavior (Dube, Felitti, Dong, Giles, & Anda, 2003; Kim & Cicchetti, 2010; Parks, Annest, Hill, & Karch, 2012).

Factors such as socioeconomic status, age, and parent support put certain individuals at a greater risk for victimization and perpetration. While CM affects children of all ages and ethnicities, children who are under 2-years-old, or who have special needs, are at a higher risk for victimization. Children under 2-years-old represent the largest percentage of victims across all types of maltreatment; 20% of victims were in the age group of 3- to 5-years-old (DHHS, 2013a; CDC, 2014). Parent risk factors for perpetrating CM include low educational attainment, social isolation, low income, teen parenting, a high number of dependent children, and single parenthood (CDC, 2014). Additional risk factors are social isolation, unemployment, mental illness, and a history of CM in the parent's family of origin (DHHS, 2013a; Hussey, Chang, & Kotch, 2006; Herrenkohl, Sousa, Tajima, Herrenkohl, & Moylan, 2008; Gilbert, Widom, Browne, Fergusson, Webb, & Janson, 2009; CDC, 2014). In 2012, domestic violence, alcohol abuse, and drug abuse were other risk factors associated with approximately 28.5%, 8.8%, and 20% of unique victimization, respectively (DHHS, 2013b). CM is a critical public health concern.

Parent-Child Interactions

Given the short- and long-term outcomes associated with maltreatment and the considerable research documenting associated risk factors, researchers and service providers have directed their attention to prevention. Primary prevention programs, such as family strengthening and family support programs are designed for the general population in an effort to prevent maltreatment incidents. Secondary prevention programs are directed at families with one or more risk factors for maltreatment and tertiary prevention programs are designed for families with indicated reports of maltreatment with the aim of preventing its recurrence. (DHHS, 2014).

A dominant practice for primary, secondary, and tertiary prevention has been the focus on parent-child relationships. This is in part due to the direct effect of CM risk factors on the quality of interaction between the parent and child. For example, economic hardship represents one of the major risk factors hindering quality interactions (Milteer & Ginsburg, 2012). While higher socioeconomic status (SES) is associated with positive parenting in minority and majority groups (Berlin, Brady-Smith, & Brooks-Gunn, 2002; Bakermans-Kranenburg, van IJzendoorn & Kroonenberg, 2004; Yaman, Mesman, van IJzendoorn, & Bakermans-Kranenburg, 2010), economic pressures in low SES families increase parental distress and correlate with lower quality parenting (Emmen, Malda, Mesman, van IJzendoorn, Prevoo, & Yeniad, 2013; Perkins, Finegood, & Swain, 2013). The greater focus on the family's day-to-day survival from economic hardships may result in limited resources, including time to invest in quality interactions (Milteer & Ginsburg, 2012). Furthermore, these daily stressors are positively related to psychological distress (Serido, Almeida, & Wethington, 2004; Stefanek, Strohmeier, Fandrem, & Spiel, 2012), which in turn contribute

to suboptimal parenting behaviors (Emmen et al., 2013) as measured by autonomy, warmth, and monitoring, and through stresses centering around food, housing, and job security (McLoyd, 1990).

Moreover, maltreatment rates differ across ethnicities and race, which are markers for complex interactions of political, economic, social and environmental factors influencing parent and child interactions (Putnam-Hornstein, Needell, King, & Johnson-Motoyama, 2013). The factors, which include environmental stress, single-parent status, and limited education, are burdens disproportionately borne by minority ethnic and racial populations (Berger, 2005; Berger, Paxson & Waldfogel 2009; Johnson-Reid, Drake & Kohl 2009; Putnam-Hornstein et al., 2013). Nevertheless, quality interactions are fundamental in every parent-child relationship and serve as the ongoing foundation through which a child develops physically, psychologically, and emotionally (Young, 2013). The child internalizes the repeated interactions with the parent as a cognitive-emotional structure regulating an understanding of self and of the parent and dyadic interactions; any hindrances to these interactions may further elevate maltreatment risks (Benedict, 2006; Anderson & Gedo, 2013).

The parent's behavior is paramount in guiding those quality interactions and also in ensuring the child's safety, guiding his or her development, and providing a nurturing environment (Young, 2013; Johnson, 2013; Obadina, 2013). Play is an appropriate context for assessing this behavior, because it is intricately associated with the various components of child development and parent-child interaction (Ross 1997; Patterson 1982; Gagnon, Huelsman, Reichard, Kidder-Ashley, Griggs, Struby, & Bollinger, 2014). Interactive play parallels child development and presents an opportunity for parents to fully engage their

children and guide cognitive, social, emotional, and physical wellbeing (Ross 1997; Koulomzin, Beebe, Anderson, Jaffe, Feldstein, & Crown, 2002; Evans & Porter, 2009; Anderson & Gedo, 2013; Milteer & Ginsburg, 2014; Gagnon et al., 2014). For example, language is an important component of parent-child interaction that lays groundwork for social and cognitive tasks, and later academic achievement (Goldin-Meadow, Levine, Hedges, Huttenlocher, Raudenbush, & Small 2014). However, in some cases of poor parent-child interactions, there are linguistic delays, less verbal teaching by parents, and fewer social language exchanges (Twardosz & Lutzker, 2010). Low quality and quantity of language in the home are associated with behavioral and emotional disturbances and increased likelihood of less advanced vocabulary skills and less grammatically complex language. It additionally hinders school readiness and places a child on a persistent trajectory of academic problems (Cohen, 1991; Voci, Beitchman, Brownlie, & Wilson, 2006; Shonkoff & Philips, 2000; Eigsti 2011; Sohr-Preston, Martin, Scaramella, Neppl, Ontai, & Conger, 2013). Play presents the opportunity for building the child's vocabulary, strengthening social ties, building trust, and helping the child learn how to communicate clearly.

Interventions

To prevent CM and address the impairments to quality interactions between parent and child, an increasingly prevalent strategy is the delivery of services, through evidence-based home visiting programs. Home visiting is an opportunity to intervene early in the lives of high-risk families in order to strengthen the family unit, ensure the safety of the home environment, and promote the child's development and wellbeing. A number of evidence-based programs have been demonstrably effective with outcomes such as improved child safety, improved health and wellbeing, reduced rates of future abuse reports, and family

preservation (Chaffin & Friedrich, 2004; Guastaferro, Lutzker, Graham, Shanley, & Whitaker, 2012; Paulsell, Del Grosso, & Supplee, 2014). By targeting high-risk families, improving the quality of parent-child interactions, child development and home environments, and promoting quality parenting behaviors, home visitors impart positive parenting strategies (Howard & Brooks-Gunn, 2009). The research presented here involves two evidence-based parenting programs, Parents as Teachers and SafeCare®.

Parents as Teachers. Parents as Teachers (PAT) is an evidence-based parenting program that is effective in promoting school readiness, language ability, and cognitive development in children (Pfannenstiel & Seltzer, 1989; Pfannenstiel, Seitz, & Zigler, 2002; Zigler, Pfannenstiel & Seitz, 2008; Drotar, Robinson, Jeavons, & Kirchner, 2009). The curriculum is designed to give children a solid foundation for success, prevent and reduce child abuse, and empower parents to provide the best quality care for their children. A primary focus of PAT is on child outcomes. Families are supported through parent group meetings, referrals to community services as needed, routine developmental screenings, and regularly scheduled home visits (called personal visits) by certified Parent Educators (Wagner, Spiker, & Linn, 2002). Parent Educators (home visitors) teach appropriate child development expectations, address parent questions and concerns, and model and promote strong parent-child relationships (Zigler, Pfannenstiel, & Seitz, 2008).

PAT is a voluntary program for all children in a family, available to anyone expecting a child or with a child up to 5-years-old. Through a didactic approach, parents learn various parenting strategies, and are provided with handouts and booklets during each visit to supplement what has been presented to them by the providers. The frequency of home visits is dependent on the level of risk for families as defined by the PAT National Center. A

family at higher risk for CM will typically receive more home visits (at least 24 annual personal visits). Families with one or fewer high need characteristics receive at least 12 annual personal visits (Parents as Teachers [PAT], 2014).

The PAT curriculum addresses three areas of emphasis in each of the personal visits: parent-child interactions, development-centered parenting and family well-being. The development centered parenting component links child development and parenting, thus aiming to increase parent knowledge of early childhood development and parenting practices (Zigler, Pfannenstiel & Seitz, 2008; PAT, 2012). The family well-being component connects families to community resources that may address their needs; the parent-child interaction component focuses on parenting behaviors, child development and parent-child activities (SAMHSA's National Registry of Evidence-based Programs, 2014; PAT, 2014).

SafeCare. SafeCare is an evidence-based home visiting program for families at-risk for CM with at least one child under 5-years-old. SafeCare improves parenting behaviors and has been shown to reduce rates of maltreatment and recidivism, household hazards, and parent reports of stress and depression, while improving parents' child healthcare skills (Bigelow & Lutzker, 2000; Gershater-Molko, Lutzker, & Wesch, 2002; Gershater-Molko, Lutzker, Wesch, 2003; Guastaferro, Lutzker, Graham, Shanley, & Whitaker, 2012; Chaffin, Hecht, Bard, Silovsky, & Beasley, 2012). It has also established high levels of cultural congruency, usefulness, and participant satisfaction (Damashek, Bard, & Hecht, 2012; Beasley, Silovsky, Owora, Burris, Hecht, DeMoraes-Huffine, Cruz, Tolma, 2014)

The SafeCare curriculum is delivered in-situ, that is, within the home where typical activities, routines, and contexts of the family occur naturally. By training the parents in the home, it is believed they will be able to generalize to other situations outside of the home.

Parents are trained in three core skill areas: child health, home safety, and parent-child or parent-infant interaction. The health module trains parents to appropriately identify and respond to their child's health needs, specifically injuries and illnesses (Bigelow & Lutzker, 2000; Delgado & Lutzker, 1988; Strong, Lutzker, Jabaley, Shanley, Self-Brown, & Guastaferro, 2014). The home safety module is designed to help parents maintain a safe and healthy home environment by reducing the number of hazards, and filth and clutter in the home (Tertinger, Greene, & Lutzker, 1984; Mandel, Bigelow, & Lutzker, 1998; Jabaley, Lutzker, Whitaker, & Self-Brown, 2011). The parent-child or parent-infant modules, which are the modules relevant to the research presented here, are delineated by child age and whether or not a child is walking. Families with an infant (a child that is not yet ambulatory) receive the parent-infant interaction module, whereas families with a child who is walking receive the parent-child interaction module. The focus of both interaction modules is to increase the quality and frequency of positive parent-child interactions (Guastaferro et al., 2012).

The parent-child interaction module teaches parents to use positive interaction skills that incorporate incidental teaching and planned activities to decrease challenging child behaviors and increase quality interactions. The parent-infant interaction module teaches parents to create a nurturing environment for the infant by strengthening stimulation and engagement behaviors (Guastaferro et al., 2012). The core behaviors, identified as *LoTTs of Bonding*, are looking, talking, touching, and smiling at the baby and can be done during any activity or situation. Parents learn to increase positive interactions that support development and they develop the skills needed for reading, understanding, and responding to the infant's

needs while also learning about infant development and age-appropriate activities (Gaskin, Lutzker, Crimmins, & Robinson, 2012; Guastaferro et al., 2012).

PATSCH

The research presented here is drawn from an ongoing cluster randomized trial funded by the Annie E. Casey Foundation. PATSCH, Parents as Teachers and SafeCare at Home, is a braided curriculum from the individual PAT and SafeCare curricula developed for the purposes of the ongoing research trial. The goal is to explore how the braiding of the two evidence-based parenting programs may lower the risk of child maltreatment, promote better parenting outcomes, and improve child outcomes, specifically developmental outcomes and school readiness. It is hypothesized that compared to families only receiving Parents as Teachers, those receiving both PAT and SafeCare through the braided curricula will have better outcomes across all three measures. A control group receives PAT services as usual and the experimental group receives PATSCH, the braided curriculum. The braided curriculum maintains fidelity to each program's curriculum. The key components of the PAT and SafeCare curricula are implemented concurrently, allowing families to receive complementary information and improve knowledge and parenting skills. PAT adds a component of parent training on school readiness and SafeCare adds a focus on health and safety.

Presented here is an interim analysis of PATSCH and control group baseline data with a focus on the parent-child interaction. It was hypothesized that parent-child interaction, as measured by KIPS scores, would be significantly and negatively associated with potential for maltreatment among PATSCH families. This relationship was further analyzed to

determine if demographic variables served as moderators for the relationship. Specific a-priori hypotheses were not generated for the moderation analyses.

Method

PATSCH (Parents as Teachers and SafeCare at Home)

The PATSCH study was approved by Georgia State University and the Georgia Department of Human Services Institutional Review Boards. The unit of randomization for the study is the site level so as to increase internal validity and to reduce the risk of contamination from intra-agency information sharing. Sites were recruited through convenience sampling. The first cohort includes 12 existing PAT sites in Georgia and North Carolina; 6 of those sites are randomly assigned to the PATSCH braided curriculum and the other 6 sites assigned to PAT as usual. The second cohort includes seven sites from South Carolina also randomized into PATSCH and PAT as usual groups. All the selected sites in the study (19) were matched for location (urban or rural), number of providers, and demographic characteristics (specifically, primary language spoken). The providers at the PAT sites randomized to provide PATSCH were trained in the braided curriculum by trainers from the National SafeCare Training and Research Center (NSTRC) and coached as specified by SafeCare fidelity requirements.

The target populations for the PATSCH study are families currently receiving extant PAT services that have at least one child under 4-years-old at elevated risk for child maltreatment. While both SafeCare and PAT services are for children from birth to 5, the study places a maximum child age of 4-years-old at enrollment because the families are followed for 12-months. The age restriction ensures that the children are still within the ages eligible to receive SafeCare at follow-up. Families identified as high-risk meet at least two of

five CM risk factors: single parent status, low socioeconomic status, English as not a native language, low parental educational attainment, or teen parent status. An additional eligibility criterion is the completion of five of the PAT foundational visits.

Once the families are enrolled, one parent and one child become the target participants for the study. The target parent is the parent already receiving PAT services and the target child is identified by age. The selection of one target child and one parent allows for direct tracking of changes in parenting skills and parent-child interactions from baseline through 12-month follow-up. This is in contrast to the typical PAT approach whereby the family is treated as a whole and multiple children are observed. Participants are incrementally compensated at each assessment: $40 at baseline, $50 at the 6-month assessment, and $60 at the 12-month assessment.

Implementation. Parent education through the PATSCH curriculum occurs within the three SafeCare domains (safety, health, and parent-child/parent-infant interactions). The training sessions use a teaching framework rooted in applied behavior analysis and social learning theory; that is, content is first explained and modeled by the home visitor, then the parent is asked to practice the newly learned skills and is provided descriptive feedback. The duration of each visit is 45-90 minutes and each module consists of four sessions, though additional sessions may be added if the parent is struggling to master any of the skills. Once the parent has met the mastery criterion for a module, the parent proceeds to the next module, until all modules are completed.

Data Collection. The Georgia State University research team is responsible for all data collection. These data include administrative level data (e.g., a family's enrollment date, PAT service history and reports to child protective service agencies), PATSCH service

implementation data (e.g., paperwork completed in the delivery of the PATSCH sessions such as direct observation and evaluations of skills), and data collected from individual assessments. Individual level data are collected through standardized measures that are collected by the PATSCH research team at the 3 time points: at PATSCH enrollment (baseline), 6-months and 12-months, postenrollment. The PATSCH data collectors include trained Georgia State University staff and graduate students and because of the geographical dispersion of sites, locally hired North Carolina data collectors. All data collectors were trained to conduct assessments in a consistent manner by Georgia State University staff through webinar or in-person training and practice sessions.

During each individual assessment, the target parent completed an Audio Computer Assisted Self-Interviewing (ACASI) survey, two rooms in the home were video recorded for the environmental scan, and a 5-10 minute interaction between parent and child was also recorded. The ACASI interview gathers information on variables such as depression (Center for Epidemiological Studies Depression Scale), family violence (Conflict Tactic Scale II; Maternal Child Neglect Scale), family support and functioning (Protective Factors Survey; alcohol and drug use scales), and basic demographic information (including, but not limited to, education, income, and additional social supports received). The environmental scan is used to assess the number of household hazards identified using the Home Accident Prevention Inventory (HAPI; Tertinger, Greene, & Lutzker, 1984). For the baseline, 6-month, and 12-month assessments, the same two rooms (e.g., living room and kitchen) were recorded, unless the family moved to a new location.

For the parent-child interaction video, parents were instructed to play with the child for 5 to 10 minutes as they typically would. The families used household play materials and

had free choice of play activity and room location. The interaction was recorded by the data collectors using a NOKIA flip camera. Home visitors and providers were asked to refrain from becoming involved in the interaction and no prompting as to the activity chosen was provided.

When data collection was complete, the environmental and interaction videos, along with the ACASI surveys, were transferred to a central hard drive at Georgia State University and de-identified with a code name for each participant.

Present Study

The research presented here is an interim analysis of data collected from the ongoing PATSCH trial, with a focus on the first cohort of sites in Georgia and North Carolina. Data collected at the baseline conducted between November 2012 and September 2014 were included in this analysis. Specifically, this research sought to examine any correlation between parenting behaviors during play and the potential for child maltreatment across demographic variables.

Participants. Data were collected from 99 participants. Complete demographic information is presented in Table 1. The majority of participants were female (97.9%) and single (51.0%); 43.8% reported that they were married or living with a partner and on average, 2.18 (*SD*=1.29*)* children were living in the households. The racial makeup was 40.4% white, 21.3% black, and 8.51% Asian; 38.5% of the sample were Latino. The mean age of the parents was 27.8 years old (*SD*=6.55*),* ranging from 17- to 46-years-old. Additionally, most of the families reported an annual household income of less than $10,000 per year (51.4%). Approximately 43.8% of the participants reported that they had less than a

high school education, while 32.3% reported the completion of a high school diploma or GED, and 24.0%, the completion of a college degree or some college.

Table 1. Demographic Variables

		n (%)
Gender	*Female*	94 (97.9)
	Male	2 (2.08)
Marital Status	*Single*	54 (56.3)
	Married or living with a partner	42 (43.8)
Number of Children in the Household	*1*	38 (39.6)
	2	24 (25.0)
	3+	34 (35.4)
	Mean (SD)	2.18 (1.29)
Race	*White*	38 (40.4)
	Black	20 (21.3)
	Asian	8 (8.51)
	Other	28 (29.8)
Latino	*Yes*	37 (38.5)
	No	59 (61.5)
Age	*21 and under*	18 (20.0)
	22-30	40 (44.4)
	31 and up	32 (35.6)
	Mean (SD)	27.8 (6.55)
Annual Household Income	*Less than 10k*	38 (51.4)
	10k and up	36 (48.7)
Education	*Less than high school*	42 (43.8)
	High school degree, GED	31 (32.29)
	More than high school	23 (24.0)

Study Measures. Examined here was the relationship between the potential for abuse and the quality of parent behavior during interactive play. To accomplish this, two measures were the focus of the analysis.

Brief Child Abuse Potential Inventory (BCAP). The Brief Child Abuse Potential Inventory (BCAP) is a measurement tool that uses a 33-item scale to screen for abuse potential. It is the shortened version of the Child Abuse Potential Inventory (CAP; Milner, 1986); research shows that it has a very strong correlation (r=.96) with the CAP (Ondersma, Chaffin, Mullins, & LeBreton, 2005). The finding suggests that the BCAP is a useful and reliable tool for screening child abuse potential, utilizing a shorter question framework.

For the purposes of this study, the BCAP is obtained from the ACASI component of the baseline assessments. The scale contains seven factors: happiness, distress, financial insecurity, family conflict, feelings of persecution, rigidity, and loneliness. Two additional components, the lie and random responding scales, provide an indication of the reliability of the participant responses. Respondents were asked to respond if they "Agree" or "Disagree" with each statement presented. If one or more random responding scale entries or four or more lie scale entries are endorsed, or both, participant responses are considered to be potentially invalid (Ondersma et al., 2005; Walker & Davies, 2012).

Keys to Interactive Parenting Scale (KIPS). The Keys to Interactive Parenting Scale (KIPS) is a structured observational assessment tool for assessing the quality of parenting behaviors that influence a child's development. It measures quality parenting behaviors thought to improve attachment security, such as holding and touching, sensitivity, emotional support, and responsiveness to the child (De Wolff & van IJzendoorn 1997; Miller & Commons, 2010). The scale has been tested with at-risk and nonrisk economically,

educationally, and ethnically diverse populations and in suburban, rural, and urban communities. Furthermore, it has high internal scoring consistency (α=0.95) (Comfort & Gordon, 2006; Comfort, Gordon, & Naples, 2011).

KIPS was developed from the Parent/Caregiver Involvement Scale (P/CIS; Farran, Kasari, Comfort & Jay, 1986). The scale rates the quality, frequency, and appropriateness (i.e., matching child's developmental needs) of parent behaviors and impressions of the learning environment and affective climate. Upon refinement of the P/CIS over several iterations, the resulting KIPS scale identified 12 specific parenting behaviors to be observed and assessed during free play (Comfort & Gordon, 2006). The 12 behaviors are presented in Table 2. The 12 behaviors are grouped into three categories based on how the behaviors support and guide quality parenting. The first five are classified as 'building relationships', the next behaviors (6-9), as 'promoting learning', and the final three (10-12) as 'supporting confidence'.

The individual behaviors are scored on a one to five scoring rubric. For all behaviors, a rating of one indicates poor quality parenting behavior, a rating of three indicates moderate quality, and a rating of five indicates high quality (Comfort & Gordon, 2006). If the behavior being scored is language experience, the parents were scored one if they rarely listened and talked with the child. However, they received higher scores when they appropriately and consistently conversed with the child, responded verbally to the child's cues, and linked the activities to familiar experiences. Behaviors that were not displayed in the parent-child interactions were simply marked as 'not observed' (NOB); with the exception of behaviors 11 and 12 which must be scored per KIPS. Once all behaviors have been rated, a mean score is calculated. To calculate a KIPS mean score, the individual scores

are added, then divided by the number of items scored, excluding the items scored NOB. The mean scores indicate the quality of parenting. Mean scores of 1.0-2.9 are categorized as low quality scores, mean scores of 3.0-3.9 are moderate quality scores, and mean scores of 4.0-5.0 are higher quality scores (Comfort & Gordon, 2009).

Table 2. KIPS Behaviors

Building Relationships		
Number	**Behaviors 1-5**	***How appropriately and how often does the parent…***
1	Sensitivity of response	*Read and respond to the child's cues?* *Respect the child?*
2	Supportive response to emotions	*Model appropriate emotional responses?* *Respect the child's feelings?* *Console the child or celebrate with the child when appropriate?*
3	Physical interaction	*Move in synchrony with child and make eye contact?* *Get on the same eye level as the child?* *Cuddle, gently touch, or stroke the child?*
4	Involvement in child's activities	*Show interest in what the child is doing?* *Participate in the child's play, talk with child about what she is doing, or engage in turn taking play?*
5	Openness to child's agenda	*Follow the child's lead and support her choices?* *Offer new options of things to do with the toy?*
Promoting Learning		
	Behaviors 6-9	***How appropriately and how often does the parent…***
6	Engagement in language experiences	*Have conversations with child?* *Elaborate on the child's speech and use complete sentences?* *Respond verbally to the child's cues?*
7	Reasonable expectations	*Match request to developmental abilities and offer slight challenges?* *Stretch timing or complexity a little?*
8	Adapts strategies to child's interest and behaviors	*Engage the child in chosen activity in a different way?* *Improve odds of success for the child by positioning?* *Extend play?*
9	Appropriateness of limits and consequences	*Provide and follow through on clear and firm limits?* *Provide reasonable consequences?* *Help the child learn appropriate behavior; use redirection or distraction?*
Supporting Confidence		

	Behaviors 10-12	***How appropriately and how often does the parent…***
10	Supportive directions	*Provide the child with choices?* *Demonstrate technique and match the child's pace?* *Suggest rather than demand and help the child think about options?*
11	Encouraging words and actions	*Show interest in what child says and does?* *Praise/clap and motivate the child?* *Use positive words?*
12	Promotion of exploration/curiosity	*Ask questions to help child predict and solve problems?* *Make surprise sounds or movements?* *Model curiosity and exploration?*

KIPS Reliability: Training. Prior to the scoring of participant parent-child interactions, graduate research assistants (GRAs) at the Center for Healthy Development (CHD) were trained and certified in KIPS through the KIPS eLearning Software (Kipsel, 2011). Two scorers assessed the English videos and one Spanish-speaking CHD staff assessed the Spanish videos, as not all staff members were fluent in Spanish.

After certification was obtained, the two scorers were assigned to review the English videos. They were provided three parent-child interaction practice videos from the KIPS eLearning Library to independently review and score (Comfort Consults, 2014). The scorers then met and collectively discussed how they scored each of the KIPS parenting behaviors and they addressed any discrepancies and misunderstandings. This process was repeated two additional times in order to establish reliability (agreement equaling a minimum of 90%) and ensure consistency in scoring.

In order to establish reliability and consistency in the scoring of both the Spanish and English videos, all three scorers were assigned eight English videos to score. Once 100% reliability was established in all eight videos, the Spanish-speaking staff scored all Spanish videos and the two GRAs scored the English videos. During reliability training, it was

discovered that it might be difficult to score some parenting behaviors between the target parents of children under 1-year-old. For example, openness to child's agenda for a 36-month-old may be following the child's interests in book selections, or toys. For a baby 2- to 3-months-old, openness to the child's agenda would be following the baby's eye gaze and pointing, touching, or labeling, something much more difficult to score from the video (Kosanovich & Almstead, 2010).

To address this challenge, the KIPS activity chart categorized by age was used as a scoring resource. The KIPS scoring chart was also remodeled to include examples of each parenting behavior. For example, the 'encouraging words and actions' behavior included examples such as showing interest in what the child says and does, praising, using positive words, and building the child's confidence while 'openness to child's agenda' included examples such as offering new options of things to do with a toy and following the child's needs. Furthermore, scorers were asked to record notes for each video, explaining score selection and behaviors exhibited by the parents.

KIPS Scoring. The KIPS behaviors are scored on a scale of one to five (Comfort & Gordon, 2006). Collective scores for one behavior within one point of each other are considered to be in agreement. For the present study, inter-scorer agreement was calculated as: agreements divided by agreements plus disagreements, multiplied by 100. Agreement was measured for all baseline and 6-month interaction videos with an inter-scorer reliability of at least 90%. A set number of videos were individually reviewed each week, then the individual scores were collectively evaluated to ensure consistency in scoring and to address scoring challenges. If agreement fell below the 90% criterion, scorers discussed score discrepancies, then reviewed and rescored the videos until the criterion was achieved.

BCAP Scoring. The BCAP responses obtained from the baseline ACASI data were restricted to baseline scores. For each family, scores for the total risk scale and the seven subscales were collected. In order to assess the reliability of participant responses, the lie scale was also evaluated and scored according to Ondersma et al. (2005) guidelines. From an initial sample of 99 participants, 13 respondents with potentially invalid responses were removed from the study sample by their endorsement of 4 or more items on the lie scale. These responses were removed from the study sample, leaving a sample size of n=86. The Rasch analysis method (Rasch-analysis, 2012) was then used to gather raw scores for the BCAP risk scale and each subscale and address missing data due to unanswered questions. The raw total for the risk scale was divided from the total questions answered and then multiplying by 100, to calculate a mean score and ensure that the scores are weighted the same for the participants, regardless of number of questions answered. For this analysis, the BCAP score was used in a continuous format and a score of 12 or more out of the 24-item risk scale was considered to be at-risk for CM as recommended (Ondersma et al., 2005).

Data Analysis. The analysis sought to investigate the association between parenting behavior and the potential for child maltreatment among PATSCH families. It also sought to identify the moderating effect of family demographic characteristics (e.g., number of children in the household, parent age, income, marital status, gender, income, race and educational attainment). BCAP and KIPS scores were used as measures for potential for child maltreatment and quality parenting behavior, respectively.

For the current analysis, some demographic variables collected from the baseline ACASI were recoded to make moderation analyses possible. Parent age variables were categorized into three groups: under 21, 22-30, and 31 and over; marital status was

categorized into either single or married. The single category included all respondents who self-identified as single, separated, or divorced; married included respondents who were either married or living with a partner. Additionally, the annual household income was categorized into two groups – under $10,000 and over $10,000. All responses of number of children in the household that exceeded 2 children were categorized as 3+ and the race variable was categorized into white, black, Asian, and other, with an additional category for Latino or non-Latino. The other category was inclusive of two 'Pacific Islander' and 26 'other' responses. Educational attainment was reported in three categories: less than high school, high school diploma or GED, and more than high school, which included respondents who had a college degree or completed some college at the time of data collection.

First, a descriptive analysis was conducted to assess the demographic characteristic of the sample. Then, a series of regression models were conducted. The first model examined the independent effect of interactive parenting behaviors on maltreatment potential to address the hypothesis of a significant negative association and the second set of models tested the interaction of parenting behaviors and various demographic variables in predicting maltreatment potential. All data were analyzed through the SAS software (SAS 9.4, 2014).

Results

The relationship between parenting quality and the potential for abuse was not significant in this sample. The descriptive statistics of KIPS scores are shown in Table 3, the total BCAP risk scores are shown in Table 4 and the association between KIPS and BCAP scores are shown in Table 5.

The mean BCAP total risk score, which indicates the potential for child maltreatment, was collected in 86 PATSCH baseline assessments. From the 24-item risk scale, the mean BCAP scores ranged from 0 to 13, with an average participant score of 3.80 (*SD* = 3.09), indicative of moderate level of risk for maltreatment. The standard cut off score indicating high risk is generally considered to be 9 or 12 (Walker & Davies, 2012).

Descriptive statistics for the KIPS scores for all participants are shown in Table 3. The mean baseline KIPS score, which indicates the quality of parenting behaviors, was collected for 94 participants. From a possible mean of 5.00, the average participant score was 3.26 (*SD* = 0.74). Within the three behavior categories, building relationships, promoting learning, and supporting confidence, mean scores were 3.38 (*SD* = 0.73*)*, 3.12 (*SD* = 0.88*)*, and 3.22 (*SD* = 0.81*)*, respectively. For individual behaviors, the highest mean scores were 'Involvement in Child's Activities' (*M* = 3.71, *SD* = 0.84) and 'Physical Interaction' (*M* = 3.59, *SD* = 0.88) and the lowest were 'Limits and Consequences' (*M* = 2.78, *SD* = 1.17) and 'Language Experiences' (*M* = 2.96, *SD* = 1.03). These lower scores indicate low quality behaviors (mean scores less than 3.0).

Table 3. Descriptive Statistics of KIPS Scores (separated by behavior category)

Variables	n	Mean (SD)
KIPS	94	3.26 (0.74)
Building Relationships	*Mean (SD): 3.38 (0.73)*	
Sensitivity of Responses	94	3.32 (0.81)
Supports Emotions	93	3.19 (0.92)
Physical Interaction	94	3.59 (0.88)
Involvement in Child's Activities	94	3.71 (0.84)
Open to Child's Agenda	88	3.09 (0.94)
Promoting Learning	*Mean (SD): 3.12 (0.88)*	
Language Experiences	94	2.96 (1.03)
Reasonable Expectations	92	3.38 (0.90)

Adapts Strategies to Child	94	3.10 (0.97)
Limits & Consequences	18	2.78 (1.17)
Supporting Confidence	*Mean (SD): 3.22 (0.81)*	
Supportive Directions	84	3.30 (0.92)
Encouragement	94	3.26 (0.93)
Promotes Exploration/Curiosity	94	3.17 (0.85)

Note. Values are mean scores on a 5-point scale

Table 4. Total BCAP Risk Score

BCAP total risk score	Frequency	Percent
0	8	9.30
1	12	13.95
2	18	20.93
3	12	13.95
4	7	8.14
5	6	6.98
6	6	6.98
7	8	9.30
8	1	1.16
9	4	4.65
11	1	1.16
12	1	1.16
13	2	2.33

The analysis of the association between baseline KIPS and BCAP scores in participant PATSCH and control families yielded no significance ($R^2 = 0.0017$, F (1, 80) =1.36, $p = 0.25$). The interaction between KIPS and demographic variables in predicting BCAP was then examined. Several models were conducted, one for each demographic variable crossed with KIPS. Results are reported in Table 5. None of the interactions reached statistical significance.

Table 5: Association of KIPS and BCAP

Variable	DF	SS	F	Prob.
Model 1				
KIPS	1	11.9	1.36	0.25
Model 1 $R^2 = 0.0168$				
Model 2				
KIPS	1	21.7	2.46	0.12
Marital Status	1	2.13	0.24	0.62
KIPS x Marital Status	1	0.15	0.02	0.90
Model 2 $R^2 = 0.0508$				
Model 3				
KIPS	1	18.5	2.17	0.15
Income	1	0.24	0.03	0.87
KIPS x Income	1	0.44	0.05	0.82
Model 3 $R^2 = 0.0384$				
Model 4				
KIPS	1	4.56	0.50	0.48
Age	2	7.81	0.43	0.66
KIPS x Age	2	10.8	0.59	0.56
Model 4 $R^2 = 0.0387$				
Model 5				
KIPS	1	9.13	1.00	0.32
Number of Children	2	4.31	0.24	0.79
KIPS x Number of Children	2	3.06	0.17	0.85
Model 5 $R^2 = 0.0431$				
Model 6				
KIPS	1	16.0	1.91	0.18
Education	2	9.74	0.55	0.58
KIPS x Education	2	10.9	0.62	0.54
Model 6 $R^2 = 0.0748$				
Model 7				
KIPS	1	14.8	1.83	0.18
Race	3	5.40	0.22	0.88
KIPS x Race	3	12.1	0.50	0.68
Model 7 $R^2 = 0.193$				

Discussion

This study sought to examine the relationship between the quality of 12 parenting behaviors and the potential for CM among PATSCH families. This was conducted through the analysis of KIPS and BCAP scores. It also examined the interactive influence of parenting behaviors and demographic variables on the potential for CM. It was hypothesized that the parenting behaviors would be significantly and negatively associated with the potential for maltreatment among PATSCH families and specific a-priori hypotheses were not generated for the moderating effect of demographic variables.

The analysis conducted did not indicate a significant relationship between the KIPS and BCAP measures. Additionally, when examining the interaction of KIPS scores and demographic variables, a significant difference did not emerge for the relationship to BCAP scores. These findings may be a result of two underlying factors: low BCAP and moderate KIPS scores across participants and site variations in at-risk classifications.

The descriptive statistics of BCAP scores indicated that most of the participants were not at-risk for child maltreatment; given a BCAP Abuse Risk cutoff score of 9, 8 participants were identified to be at-risk, and 3 at a cutoff score of 12 (Walker & Davies, 2012). Yet, all families were identified as meeting at least two of five CM risk factors when enrolled into the larger trial: single parent status, low socioeconomic status, English as not a native language, low parental educational attainment, or teen parent status. A possible explanation for this outcome is that all sites, which differed geographically and in composition, were allowed to define what the at-risk criteria meant for their area. Due to this variation, confounding variables may play a role in the outcomes; what one site classifies as at-risk may be classified differently in another. Additionally, it is possible that participant demographics varied across

sites. An example of this would be if most participants in one site met the criteria for single parent and English as not a native language, while participants at another site met criteria for low educational attainment and low socioeconomic status. The finding suggests a need for modifications in the at-risk criteria, possibly to meeting three out of the five factors for at-risk classification, in order to capture the true at-risk population (BCAP $\geq$ 9) or defining a standard at-risk criteria for all sites. Respondents may be required to meet two set characteristics then sites may be permitted to define the third risk factor for their region.

In addition to the low BCAP scores, total average KIPS scores were, of moderate quality (KIPS mean score of 3.0 to 3.9). This is possibly because the families were exposed to PAT services prior to enrollment in PATSCH. A requirement for enrollment in PATSCH was the completion of at least five foundational PAT visits. These foundational visits include an introduction to PAT services, in addition to introduction to areas of child development and encouragement of parent-child interactions. Therefore, parents likely had a baseline understanding of the importance of parent-child interactions and of the key parenting behaviors in those interactions. This suggests that the *baseline* data, although pre-PATSCH intervention, is not void of contamination.

While the proposed hypothesis was not supported, a number of other findings are of interest. The relationship between the demographic characteristics, KIPS scores, and BCAP scores for the baseline sample offer a glimpse into the potential needs of participant families. The study identified two parenting behaviors that were of the lowest quality among participants: Limits and Consequences and Language Experiences. It is important to note that for most of the participant observations, the setting of limits and consequences behaviors was not observed during the play activity. For this reason, those responses were not included in

final analysis. From a total sample of 94, only 18 participants (19%) demonstrated this behavior in the video recordings. Nevertheless, when the behavior was observed, it was typically of low quality (mean scores under 3.0). The findings suggest Limits and Consequences and Language Experiences as critical areas for intervention.

However, it is also important to note that these KIPS behaviors are not the focus of the PATSCH intervention. Within the parent-child interaction module, parents are scored in play according to three main behaviors with aims for increasing positive interactions between parent and child, increasing planning for all activities in order to decrease stress, identifying ways to interest the child in activities, and helping parents to prevent challenging child behaviors. The three main parenting behaviors reviewed during play are: preparing the child for the activity, explaining the activity to the child, and explaining the rules and consequences. Language experiences are not a direct focus in those interactions and training sessions and the aim for rules and consequences differ slightly from those established in KIPS. Within the PATSCH study, there is a greater focus on the establishment of positive consequences. In KIPS, however, positive consequences are not a requirement; parents receive higher scores in accordance on their consistency in setting reasonable limits and their approach in helping the child learn appropriate behaviors. These differences in the parenting behaviors established under KIPS and under the PATSCH measure are important in analyzing changes or improvements in those behaviors post-intervention.

Furthermore, Moderate quality scores were identified in all behavior categories: building relationships, promoting learning, and supporting confidence. Yet, there was a variation in scores within those KIPS subgroups. The variation is more profound in the ‘building relationships’ category. While ‘involvement in child’s activities’ was relatively

high within the group, the scores were low for 'openness to child's agenda', suggesting that although parents were involved in play, the child was not always permitted to lead play and make his or her own choices. However, child-directed play is vital in the development of the emotional, cognitive, social, and physical skills of a child; it boosts the child's confidence and self-worth and additionally contributes to school success (Juster, 2013; Anderson, 2014). These findings are critical in guiding services for the families and in ensuring that the behaviors of lower quality, in addition to other moderate quality behaviors are enhanced through intervention. Typically, raters talk to the parents about their KIPS scores following scoring and as a guide to intervention. This approach may be additionally beneficial to incorporate into the PATSCH curriculum.

The study is not without limitations. A major limitation was in the amount of missing data. For the analysis, it was important to select participants that had both KIPS and BCAP scores on record. However, it was found that some of the participants only had one of those scores. Possible explanations for missing BCAP data are computer malfunction during or after ACASI survey and data override. For the missing KIPS scores, it is likely that the child or infant was sleeping at the time of the home visit such that the video recording did not take place. Further, all behaviors were scored from pre-recorded videos; the videos that had poor sound or visual quality were excluded from analysis. Due to these limitations, all baseline KIPS and BCAP scores are not represented here, opening the possibility of inadvertent bias. It is not known whether those participants excluded from the final analysis differed from those included or if the missing data was a result of systematic factors.

There were additional limitations in the duration of the parent-child interaction videos, which ranged from 2-12 minutes. Some videos were cut short likely due to child's

refusal to continue play activity or the parent's decision to stop play. These shorter videos may not fully capture the extent of the interactive parenting behaviors. There is the added downside of close observation through videos, which may alter the natural behavior of the parent and of the child. Finally, although attempts were made to control for this issue through training and pre-recording overviews of requirements in recording for the target parent and child, some videos included play of multiple adults and/or multiple children. This raised a challenge in scoring the behavior of the target parent and child. Other limitations include the relatively small sample size, which was a possible limitation in yielding statistical power and finally, the voluntary nature of PAT. Due to self-selection, the choice to participate in the study may reflect some inherent bias in the characteristics of respondents.

Despite the limitations presented, the findings presented here are promising in identifying the needs of PATSCH families and in directing the parent training modules and catering the services to family needs. The findings also present a starting point for identifying factors within the home and in the parent-child relationship that are associated with child maltreatment. Subsequent research should look at the site variations in parenting scores, BCAP risk, demographic characteristics, and services. It was previously noted that sites are allowed to define the at-risk requirements for their areas. An analysis of the demographic characteristics and scores at both baseline and 6 months may give insight to the relationship between those characteristics and parenting or maltreatment scores and the effectiveness of the PATSCH study at the site level. It may also show a different association between KIPS and BCAP and inform parent educators of the needs of the sample. Future research should seek to identify other factors that may influence the potential for child maltreatment in

participant families. Additionally, the potential demographic and site moderators should be analyzed to determine if the results would be invariant across groups.

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APPENDIX

Appendix A:

Brief Child Abuse Potential Inventory

Instructions: the following questionnaire includes a series of statements about feelings and beliefs that people sometimes have. Please read each statement and circle AGREE if you agree with the statement as it applies to you. Circle DISAGREE if you disagree with the statement as it applies to you. Be honest when giving your answers. Remember to read each statement, and be sure to answer all of them.

1. I am a happy person …… AGREE DISAGREE
2. I know what is the right and wrong way to act……. AGREE DISAGREE
3. People have caused me a lot of pain…….. AGREE DISAGREE
4. I sometimes act without thinking……. AGREE DISAGREE
5. I am often lonely inside…… AGREE DISAGREE
6. My family fights a lot…….. AGREE DISAGREE
7. Everything in a home should always be in its place…… AGREE DISAGREE
8. I often feel very upset……... AGREE DISAGREE
9. Sometimes I have bad thoughts…… AGREE DISAGREE
10. I sometimes worry that I will not have enough to eat……. AGREE DISAGREE
11. I am easily upset by my problems…….. AGREE DISAGREE
12. Sometimes I feel all alone in the world……AGREE DISAGREE
13. My family has problems getting along…… AGREE DISAGREE
14. Children should never disobey……. AGREE DISAGREE
15. I sometimes lose my temper…….. AGREE DISAGREE
16. I often feel worthless……. AGREE DISAGREE
17. My family has many problems…….. AGREE DISAGREE
18. It is okay to let a child stay in dirty diapers for a while…….. AGREE DISAGREE
19. I am often upset and do not know why…… AGREE DISAGREE
20. Children should be quiet and listen…….. AGREE DISAGREE
21. I sometimes fail to keep all of my promises……..... AGREE DISAGREE
22. I often feel very alone……. AGREE DISAGREE
23. My life is good…… AGREE DISAGREE
24. I am often upset…….. AGREE DISAGREE
25. Other people have made my life unhappy…….. AGREE DISAGREE
26. I sometimes say bad words…… AGREE DISAGREE
27, I am often depressed…… AGREE DISAGREE
28. Children should not learn how to swim…….. AGREE DISAGREE
29. My life is happy…….. AGREE DISAGREE
30. I sometimes worry that my needs will not be met…….. AGREE DISAGREE
31. I often feel alone……. AGREE DISAGREE
32. A child needs very strict rules…… AGREE DISAGREE
33. Other people have made my life hard……. AGREE DISAGREE
34. People sometime take advantage of me……. AGREE DISAGREE

APPENDIX B:

Modified KIPS Chart

<table>
<tr><td colspan="5">1. How sensitive are the caregiver's responses to the child's cues, actions or words?
Reads child's cues, react in tune with baby's cues, put yourself in child's place, be responsive to child's cues, respond to baby's cues with empathy, be respectful of child</td></tr>
<tr><td>1
In reaction to child, CG
-ignores, or
-is sarcastic, or -is harsh</td><td>2</td><td>3
In reaction to child, CG is sometimes
misses cues or
misinterprets cues, or
hesitates, or seems routine</td><td>4</td><td>5
In reaction to child, CG consistently
-reads cues, and
-understands C's point of view, and
-responds appropriately, attempting to meet C's needs</td></tr>
<tr><td colspan="5">NOTES</td></tr>
<tr><td colspan="5">2. How well does the caregiver support the child's emotions?
Model appropriate emotional responses, talk about emotions – parents and child's, help them handle their emotions, respect their feelings, console the child, celebrate with the child, modulate child's emotions</td></tr>
<tr><td>1
CG often
-is unaware, unconcerned, dismissive or misunderstands, or
-inappropriately responds to emotions
CG rarely
-reacts to C's emotions or
-models appropriate expression of emotions, or
-comments on emotions</td><td>2</td><td>3
about half the time CG
-appropriately interprets , supports, and shares C's emotions, and/or
-inappropriately responds to emotions, and
-models appropriate expression of emotions, or acknowledges or comments on emotions</td><td>4</td><td>5
CG consistently and appropriately
-interprets, supports, and shares C's emotions and
-consoles if hurt or anxious, and
-guides problem solving if angry or frustrated and
helps modulate excitement if needed,
-models appropriate expression of emotions, and
-acknowledges or comments on C's emotions</td></tr>
<tr><td colspan="5">NOTES</td></tr>
<tr><td colspan="5">3. How well does the caregiver physically interact with the child?
Move in synchrony with child, eye contact, cuddle and stroke, be on same eye level, be in proximity, gentle touch, avoid intrusion. NOTE physical involvement includes facial expressions, body language, touch, proximity and movement</td></tr>
<tr><td>1
- CG physically interacts harshly or
- physically intimidates, or
- sometimes attempts to meet C's needs</td><td>2</td><td>3
-CG physically interacts with C in a mechanical way, or
-Incidental to activities, and
-Usually attempts to meet C's needs</td><td>4</td><td>5
-CG interacts to match C's current preferences for physical involvement, and
-Ensures trust
-Consistently and appropriately attempts to meet C's needs</td></tr>
<tr><td colspan="5">NOTES</td></tr>
</table>

4. How well is the caregiver involved in the child's activities?

Tune in to what child is doing, show interest in child's activities, participate in child's play, talk with child about what she is doing, get on floor with child, engage in turn taking play

1	2	3	4	5
CG appears very detached, or highly distracted		CG shows **moderate** attention and interest, and participation through words or actions; or CG seems stuck in routines		CG **consistently** pays attention, and shows interest, and participates through words or actively joining in C's play

NOTES

5. How open is the caregiver to the child's agenda?

Follow the child's lead, let them pursue their own interests, support their choices, offer new options of things to do with toy, let them turn pages, skip pages of books

1	2	3	4	5
CG **usually** chooses the activities, or shows little flexibility whether or not C cooperates		CG **sometimes** chooses activities and C **sometimes** chooses activities		CG **consistently** pays attention, shows interest, and participates through words or actively joining in C's play

NOTES

6. How actively does the caregiver engage the child in language experiences?

Have conversations with child, elaborate on their speech, use complete sentences, respond verbally to child's cues, label things in their environment, ask the child questions

1	2	3	4	5
CG **rarely:** -listens and talks with C, or labels objects or actions, or responds verbally to C's attempts to communicate -In contrast, CG may talk without pausing		CG **usually** -Listens and talks with C, and labels objects or actions, and uses simple comments -CG rarely builds upon C's sounds, words or comments		CG **consistently** -listens and talks with C and -engages C in conversation by pausing for turn-taking, asking questions, and builds on C's sounds words or comments and -links C's activities to familiar experiences

NOTES

7. How reasonable are the caregiver's expectations for the child's abilities

Know age appropriate development, match request to developmental abilities, offer slight challenges, stretch timing or complexity a little, help them with parts they forgot

1	2	3	4	5
CG's expectations **rarely** match C's developmental abilities and may be too high or too low		CG expectations **usually** match C's developmental abilities and occasionally offer slight challenges		CG's expectations **consistently** match C's developmental abilities and frequently offer slight challenges

NOTES

8. How does the caregiver adapt strategies to the child's interest and behaviors?

Engage child in chosen toy in a different way, match activities to child's interest, place toy just out of reach to encourage, improve odds of success by positioning, extend play

1	2	3	4	5
CG **rarely** uses strategies that match C's interest and behaviors and extend C's attention to the activity; or CG makes few attempts to adjust		CG **usually** uses strategies that: -match C's interests and behaviors -extend C's attention to the activity -adjust the activity to fit C's needs		CG **consistently** uses strategies that -match C's interest and behaviors, and -extend C's attention to the activity -adjust the activity to fit C's needs

NOTES

9. How appropriate are the limits and consequences the caregiver sets for the child?

Provide clear and firm limits, provide reasonable consequences, follow through on clear and firm limits, help the child learn appropriate behavior, ease behavior using transitions, use of redirection or distraction

1	2	3	4	5
-CG rarely sets reasonable limits or consequences that fit C's comprehension or behaviors -CG may use intimidation, harsh tones of voice or physical discipline impulsively and without warning, or -CG **rarely** sets limits when needed, or uses strategies to help C learn		CG **usually** sets reasonable limits and consequences that fit C's comprehension or behaviors or CG **sometimes** shifts limits inappropriately or does not follow through with stated consequences or uses strategies to help C learn appropriate behavior		CG **consistently** sets reasonable limits and consequences that fit C's comprehension and behaviors CG limits and consequences are **consistently** firm, clear, and thoughtful and CG **consistently** helps C learn appropriate behavior by using distraction, or redirection, or choices or reasoning

appropriate behavior				
NOTES				
10. How supportive are the caregiver's directions to the child? Encourage to think on their own, give choices, demonstrate technique, clear words and actions, match child's pace, suggest rather than demand, help them think about options.				
1 CG's directions to C are too frequent, intrusive, or discourage C from thinking on his/her own	2	3 CG's directions to C are **usually** direct, firm, and leave little option for C to think on his/her own	4	5 CG's directions to C are **consistently** Supportive, phrased as suggestions or choices, or encourage C to make decisions, think of alternatives, or solve problems on his/her own
NOTES				
11. How encouraging are the caregiver's words or actions regarding the child's needs? Show interest in what child says and does, praise/clap, motivate, build confidence, use positive words, encourage child to try new activities				
1 CG **often** uses words or actions that discourage or intimidate	2	3 CG neither supports nor discourages C's confidence or inconsistently supports confidence	4	5 CG **consistently and appropriately** uses sincere words, voice tones of actions (clapping, facial expressions, or touch) to support and build confidence
NOTES				
12. How well does the caregiver promote exploration and curiosity? Ask questions to help child predict, ask questions to help child solve problems, create surprise sounds or movements, model curiosity and exploration, follow child's lead, let child explore on their own, set up safe place for child to explore				
1 CG **tends** to stifle, or move to fast or ask close-ended questions, or rarely model curiosity	2	3 CG **sometimes** moves too fast, or asks open-ended questions, or models curiosity or CG neither promotes nor stifles, or inconsistently promotes exploration	4	5 CG **often** promotes explorations, allows time, and asks open-ended questions, structures opportunities for C to discover CG appropriately engages with C in exploration and discovery
NOTES				